

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
10 November 2005 (10.11.2005)

PCT

(10) International Publication Number
WO 2005/104813 A2

(51) International Patent Classification: Not classified

(21) International Application Number:
PCT/US2005/000053

(22) International Filing Date: 3 January 2005 (03.01.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/533,894 2 January 2004 (02.01.2004) US

(71) Applicant (for all designated States except US): **UNIVERSITY OF ROCHESTER** [US/US]; 518 Hylan Building, Rochester, NY 14627 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MILLER, Benjamin, L.** [US/US]; 17 Rolling Meadows Way, Penfield, NY 14526 (US). **STROHSAHL, Christopher, M.** [US/US]; P.O. Box 353, Saugerties, NY 12477 (US).

(74) Agents: **MERKEL, Edwin, V.** et al.; Nixon Peabody LLP, Clinton Square, P.O. Box 31051, Rochester, NY 14603-1051 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/104813 A2

(54) Title: METHOD OF IDENTIFYING HAIRPIN DNA PROBES BY PARTIAL FOLD ANALYSIS

(57) Abstract: Method of identifying molecular beacons in which a secondary structure prediction algorithm is employed to identify oligonucleotide sequences within a target gene having the requisite hairpin structure. Isolated oligonucleotides, molecular beacons prepared from those oligonucleotides, and their use are also disclosed.